

CLAIMS

What is claimed is:

1. A dishwasher, comprising:
a cabinet having a cavity;
a frame to be moved forward and backward in the cavity;
a rack holding dishes; and
a plurality of rotary members, each rotary member rotatably mounted at a lower end thereof to the frame and at an upper end thereof to the rack so the rack is moved up and down with respect to the frame.
2. The dishwasher according to claim 1, further comprising a stopper mounted at a predetermined position of the frame, wherein the rotary member is stopped by the stopper so the rotary member is not forwardly rotated beyond a predetermined distance.
3. The dishwasher according to claim 2, further comprising:
an upper hinge shaft; and
a lower hinge shaft, wherein the rotary members are mounted to a side of the rack by the upper hinge shaft and to a side of the frame by the lower hinge shaft, respectively, so as to be rotated forward and backward with respect to the frame.
4. The dishwasher according to claim 3, wherein an extension piece upwardly extends from both sides of the frame, and the stopper is included on the extension piece to be inwardly projected from the extension piece.
5. The dishwasher according to claim 4, wherein the stopper is provided on the extension piece so a forward rotation of the rotary member is stopped at a position where the rotary member is rotated forward substantially beyond a right angle from a horizontal position thereof.
6. The dishwasher according to claim 4, wherein the stopper is provided on the extension piece so a forward rotation of the rotary member is stopped at a position where the rotary member is rotated forward at an angle of 110° from a horizontal position thereof.

7. The dishwasher according to claim 3, wherein a damper is mounted to an outer surface of the lower hinge shaft which rotatably mounts the rotary member to the frame, so the rack is slowly moved toward the frame during a downward movement of the rack.

8. The dishwasher according to claim 1, wherein a handle is provided at an upper portion of the rack so that both ends of the handle are rotatably mounted to both sides of the rack, thus allowing the rack to be easily moved upward.

9. A dishwasher, comprising:
a cabinet defining an interior washing cavity;
a frame to move in and out of the washing cavity;
a rotary member that rotatably mounts to the frame at a first end thereof; and
a rack that rotatably mounts to the second end of the rotary member.

10. The dishwasher according to claim 9, wherein the frame is substantially rectangular.

11. The dishwasher according to claim 9, wherein the frame comprises:
a sliding rail; and
a rail fixed to the cavity, wherein the sliding rail moves along the rail fixed to the cavity.

12. The dishwasher according to claim 9, further comprising rollers on front and rear ends of the frame.

13. The dishwasher according to claim 9, further comprising an extension piece integrally connecting to and extending from a front portion of the frame.

14. The dishwasher according to claim 13, further comprising a stopper on an inner surface of and projecting from the extension piece.

15. The dishwasher according to claim 9, further comprising an extension piece integrally connecting to and extending from a middle portion of the frame.

16. The dish washer according to claim 15, further comprising a stopper on an inner surface of and projecting from the extension piece.

17. The dishwasher according to claim 9, further comprising a lower hinge shaft connecting to the frame and the first end of the rotary member.

18. The dishwasher according to claim 9, further comprising a damper on an outer surface of the lower hinge shaft.

19. The dishwasher according to claim 9, further comprising an upper hinge shaft connecting to the rack and the second end of the rotary member.

20. The dishwasher according to claim 9, wherein when the rotary member rotates backward, the rack comes in to close contact with the frame.

21. The dishwasher according to claim 9, wherein when the rotary member rotates forward, the rack moves apart from the frame.

22. The dishwasher according to claim 9, further comprising a handle at an upper portion of the rack.